STATE OF MONTANA Department of Environmental Quality Helena, Montana 59620

# AIR QUALITY OPERATING PERMIT NUMBER OP2459-04

Operating Permit Renewal Application Received: **December 7, 2005** Application Deemed Administratively Complete: **December 7, 2005** Application Deemed Technically Complete: **December 7, 2005** 

AFS Number: 030-095-0001A

Draft Issue Date: March 8, 2007 Proposed Issue Date: April 13, 2007 End of EPA 45-day Review: May 29, 2007

Date of Decision: May 30, 2007 Effective Date: June 30, 2007 Expiration Date: June 30, 2012

In accordance with Section 75-2-217 and 218, Montana Code Annotated (MCA), and Administrative Rules of Montana (ARM), Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, et seq.,

Stillwater Mining Company – Nye Sections 1, 2, 10, 11, 15, 16, 21, and 23, Township 5 South, Range 15 East, Stillwater County, Montana 2562 Nye Road Nye, MT 59061

hereinafter referred to as "Stillwater," is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements that are only state enforceable are identified in the permit. A copy of this permit shall be kept on site at the above-named facility.

Issued by the Department of Environmental Quality Signature

**Permit Issuance and Appeal Processes:** In accordance with ARM 17.8.1210(j), the Department of Environmental Quality's (Department) decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision issued May 30, 2007. The decision may be appealed to the Board of Environmental Review by filing a request for a hearing within 30 days after the date of decision. If no appealed is filed then the Department will send notification and a final permit cover page to be attached to this document stating that the permit is final. In addition, ARM 17.8.1233 allows for any person to petition the Environmental Protection Agency (EPA) within 60 days after the expiration of EPA's 45-day review period to object to issuance of this operating permit. If EPA objects to the operating permit as a result of a petition prior to the Department's notification of a final permit, Stillwater and all affected parties will be informed of the stay of a final permit. If the Department has already notified Stillwater and all affected parties, the Department shall issue a revised permit according to ARM 17.8.1231. Questions regarding the final issuance date and status of appeals should be directed to the Department at (406) 444-3490.

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

#### SECTION I. **GENERAL INFORMATION**

The following general information is provided pursuant to ARM 17.8.1210(1).

**Company Name:** Stillwater Mining Company

Mailing Address: 2562 Nye Road

**Zip Code:** 59061 City: Nye **State:** Montana

Plant Location: Township 5 South, Range 15 East, Stillwater County, Montana

Responsible Official: John Stark, Vice President **Phone:** (406) 373-8700

Facility Contact Person: Randy Weimer **Phone:** (406) 328-8529

**Primary SIC Code:** 1099 - Miscellaneous Metal Ores

**Nature of Business:** 

Underground platinum/palladium mine, ore processing plant, and tailings disposal facility.

# **Description of Process:**

The Stillwater Mine is located in Stillwater County near Nye, Montana. The facility is an underground platinum/palladium (platinum group metals) mine. The operation includes ore and waste excavation, crushing, conveying, grinding, flotation concentration, fabric filtration, and tailings disposal. The concentrate is trucked to Stillwater Mining Company's Metallurgical Complex for further processing.

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#### SECTION II. **SUMMARY OF EMISSION UNITS**

The emission units regulated by this permit are the following (ARM 17.8.1211):

Emission Unit ID	Description	Pollution Control Device/Practice
EU001	Mine Ventilation Exhaust	NA
EU002	Crushing Ore (Surface)	Water Spray and/or Chemical Dust Suppressant as Necessary; Fabric Filter Baghouse
EU003	Load Dump; Coarse Ore into Crusher Hopper	Water Spray and/or Chemical Dust Suppressant as Necessary
EU004	Load Dump; Course Ore into Mill Hopper	Water Spray and/or Chemical Dust Suppressant as Necessary
EU005	Conveying System Transfer Points	Water Spray and/or Chemical Dust Suppressant as Necessary
EU006	Load Dump; Waste Rock onto Tailings Embankment / Storage	Water Spray and/or Chemical Dust Suppressant as Necessary
EU007	Disturbed Areas	Water Spray and/or Chemical Dust Suppressant as Necessary; Re-Vegetation
EU008	Haul Roads	Water Spray and/or Chemical Dust Suppressant as Necessary
EU009	Diesel Use	NA
EU010	Unleaded Gasoline Use	NA
EU011	Paste Plant Emergency Flush Pump Emergency Diesel Generator	500 Hour Annual Operational Limit; Emergency/Back-Up Operation Only
EU012	Cement Batch Plant Operations	Water Spray and/or Chemical Dust Suppressant as Necessary; Enclosure and Fabric Filtration
EU013	Diesel Air Compressor #1	Good Combustion Practices
EU014	Diesel Air Compressor #2	Good Combustion Practices
EU015	Soda Ash Silo Bin Vent	Fabric Filter Baghouse

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#### SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

# A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	E= 0.882 * H <sup>-0.1664</sup> Or E= 1.026 * H <sup>-0.233</sup>
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E=4.10 * P^{0.67} \text{ or}$ $E=55 * P^{0.11} - 40$
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	
A.14	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.15	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	
A.16	ARM 17.8.1207	Reporting Requirements	Annual Certification	

# **Conditions**

Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air A.1. contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list "as required by the Department" refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing "as required by the Department" as the frequency, is verified annually using emission factors and engineering calculations by the Department's compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the annual inspection by the compliance inspector.

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- A.2. Pursuant to ARM 17.8.304(1), Stillwater shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.304(2), Stillwater shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), Stillwater shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), Stillwater shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, Stillwater shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, Stillwater shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):  $E = 0.882 * H^{-0.1664}$ 

For new fuel burning equipment (installed on or after November 23, 1968):  $E = 1.026 * H^{-0.233}$ 

Where H is the heat input capacity in million BTU (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, Stillwater shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour:  $E = 4.10 * P^{0.67}$ For process weight rates in excess of 30 tons per hour:  $E = 55.0 * P^{0.11} - 40$ 

Where E = rate of emissions in pounds per hour and p = process weight rate in tons per hour.

A.9. Pursuant to ARM 17.8.322(4), Stillwater shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.

- A.10. Pursuant to ARM 17.8.322(5), Stillwater shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.324(3), Stillwater shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, Stillwater shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, Stillwater shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 CFR 63.6. Stillwater shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.15. On or before February 15 and August 15 of each year, Stillwater shall submit to the Department the compliance monitoring reports required by Section V.D. These reports shall contain all information required by Section V.D., as well as the information required by each individual emissions unit. For the reports due by January 31 of each year, Stillwater may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

OP2459-04 5 Date of Decision: 05/30/07 A.16. By February 15 of each year, Stillwater shall submit to the Department the compliance certification required by Section V.B. The annual certification required by Section V.B shall include a statement of compliance based on the information available, which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

> any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

## **B.** EU001 – Mine Ventilation Exhaust

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
B.1, B.2, B.3, B.4, B.5, B.6	Opacity	20%	Method 9	Semiannual	Semiannual
			Visual Surveys	Weekly	

#### **Conditions**

B.1. Stillwater shall not cause or authorize emissions from the mine ventilation exhaust to be discharged into the outdoor atmosphere that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

## **Compliance Demonstration**

Once per calendar week during daylight hours, Stillwater shall visually survey the mine B.2. ventilation exhaust for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on the mine ventilation exhaust for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

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# Recordkeeping

B.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.B.2. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).

# Reporting

- B.4. All source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.5. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.6. The semiannual reporting shall (ARM 17.8.1212):
  - Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.B.2; and
  - b. Certify that a log of corrective actions was maintained as specified by Section III.B.3.

# C. EU002, EU003, EU004, EU005 – Crushing Ore (Surface); Crusher Load-Out Hopper; Mill Load-Out Hopper, Conveying System Transfer Points.

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting
01.01.07	D 1 16	0.05	Method	Frequency	Requirements
C.1, C.4, C.5, C.9, C.11, C.13, C.14 C.15, C.16	Particulate Matter	0.05 grams/dscm	Method 5	As Required by the Department and Section III.A.1	Semiannual
			Operation and	Whenever	
			Maintenance of the Nordberg Baghouse	process equipment is operating	
C.1, C.5, C.7, C.9, C.11,	Opacity	7% (stack/point source)	Method 9	Semiannual	
C.13, C.14, C.15, C.16			Visual Surveys	Weekly	
C.13, C.10			Operation and Maintenance of	Whenever process	Semiannual
			the Nordberg Baghouse	equipment is operating	
C.1, C.6, C.7,	Opacity	10% (fugitive	Method 9	Semiannual	
C.9, C.12, C.13, C.14, C.15, C.16		source)	Visual Surveys	Weekly	Semiannual
C.2, C.8, C.10, C.15, C.16	Mine Production and Milling Rate Limit	1,825,000 ton/yr and/or 5000 tons/day	Recordkeeping	Ongoing	Semiannual
C.1, C.3, C.8, C.13, C.15, C.16	NSPS Requirements 40 CFR 60, Subpart LL	Applicable Requirements	Recordkeeping	Ongoing	Semiannual

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#### **Conditions**

- C.1. Stillwater shall comply with all applicable standards, limitations, and the reporting, record keeping, and notification requirements of 40 CFR 60, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) which include, but are not limited to, the following (ARM 17.8.340, ARM 17.8.752, and 40 CFR Part 60, Subpart LL):
  - Stillwater shall not cause or authorize to be discharged into the outdoor atmosphere from the surface Nordberg cone crusher, surface jaw crusher, crusher load-out hopper(s), mill load-out hopper, and the above-ground conveying system(s), particulate matter in excess of 0.05 gram per dry standard cubic meter;
  - b. Stillwater shall not cause or authorize to be discharged into the outdoor atmosphere from the surface Nordberg cone crusher, surface jaw crusher, crusher load-out hopper(s), mill load-out hopper, and the above-ground conveying system(s), any stack/point source emissions that exhibits an opacity of 7% or greater averaged over 6 consecutive minutes;
  - c. Stillwater shall not cause or authorize to be discharged into the atmosphere from the surface Nordberg cone crusher, surface jaw crusher, crusher load-out hopper(s), mill load-out hopper, and the above-ground conveying system, any process fugitive emissions that exhibit greater than 10% opacity averaged over 6 consecutive minutes.
- C.2. Mine production and milling rates shall not exceed 1,825,000 tons during any rolling 12-month time period or 5000 tons during any rolling 24-hour period (ARM 17.8.749).
- C.3. Stillwater shall comply with all applicable standards and limitations, test methods and procedures. and the reporting, recordkeeping and notification requirements contained in 40 CFR Part 60, Subparts A and LL, as it applies to the surface crusher(s) and the above-ground conveying system(s) (ARM 17.8.752, ARM 17.8.340, and 40 CFR Part 60, Subpart LL).

# **Compliance Demonstration**

- C.4. As required by the Department and Section III.A.1, Stillwater shall perform a Method 5 source test to monitor compliance with the emission limitations in Section III.C.1. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- C.5. Stillwater shall utilize a fabric filter baghouse to control particulate emissions from the surface Nordberg cone crusher. Stillwater shall inspect and maintain the fabric filter baghouse to ensure proper operation of the baghouse (ARM 17.8.1213).
- C.6. Water and/or chemical dust suppressant shall be available on site and used, as necessary, to maintain compliance with the opacity limitations for process fugitive emissions in Section III.C.1 (ARM 17.8.752).
- C.7. Once per calendar week during daylight hours, Stillwater shall visually survey the primary crusher loading/unloading, crusher and mill load-out hoppers, all material transfer points associated with the primary crusher, and for any other associated source for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive

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emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on surface crushing operations, crusher and mill load-out hoppers, all material transfer points associated with the surface crusher(s), and for any other associated source of excessive fugitive emissions for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 7% (stack/point source) or 10% (fugitive source) or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

C.8. Compliance monitoring for mine production and milling rates (Section III.C.2), fabric filter baghouse control on the surface Nordberg crusher (III.C.5), water and/or chemical dust suppressant availability and use (III.C.6), and applicable 40 CFR Part 60, Subparts A and LL, requirements (Section III.C.3) shall be accomplished through recordkeeping (ARM 17.8.1213).

# Recordkeeping

- C.9. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.C.7. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).
- Stillwater shall maintain a monthly log monitoring compliance with the mine production and milling rate limit. The log shall include, at a minimum, daily mine production and milling rates on a rolling 12-month basis and the initials of the documenting personnel (ARM 17.8.1212).
- Stillwater shall maintain a log monitoring compliance with the requirement to operate a fabric filter baghouse to control emissions from the surface Nordberg crusher. The log shall include any maintenance activities associated with Section III.C.5 including the date, time, action taken, and the initials of the documenting personnel (ARM 17.8.1212).
- C.12. Stillwater shall maintain a log indicating water and/or chemical dust suppressant availability and use for monitoring compliance with process fugitive emissions limitations (ARM 17.8.1212).
- Stillwater shall maintain a log monitoring compliance with the requirements of 40 CFR Part 60, C.13. Subparts A and LL, as applicable (ARM 17.8.1212).

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# Reporting

- C.14. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.15. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.16. The semiannual reporting shall (ARM 17.8.1212):
  - Summarize the results of any source testing conducted during the reporting period;
  - b. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.C.7;
  - c. Certify that a log of corrective actions was maintained as specified by Section III.C.9;
  - d. Summarize the production information required in Section III.C.10;
  - e. Certify that a log was maintained for operation of the baghouse as specified in Section III.C.11:
  - f. Certify that a log was maintained for the use of water and/or chemical dust suppressant as specified in Section III.C.12; and
  - g. Certify compliance with the requirements of 40 CFR Part 60, Subpart LL, as applicable.

# D. EU006 – Waste Rock onto Tailings Embankment/Storage

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
D.1, D.4, D.6, D.8, D.9, D.10	Opacity	20%	Method 9 Visual Surveys	Semiannual Weekly	Semiannual
D.2, D.5, D.7, D.9, D.10	Mitigation Measures	Tailings Storage Area: Control Installation	Normal Operation and Maintenance	As Required by the Department and Section III.A.1	Semiannual
D.3, D.5, D.7, D.9, D.10	Mitigation Measures	East-Side Waste Rock Storage Area: Control Installation	Normal Operation and Maintenance	As Required by the Department and Section III.A.1	Semiannual

# **Conditions**

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- D.1. Stillwater shall not cause or authorize emissions from the tailings embankment/storage area to be discharged into the outdoor atmosphere that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308).
- D.2. As required by the Department and Section III.A.1, Stillwater shall install a sprinkler system or provide equivalent mitigative measures to control wind-blown emissions from the tailings facilities. The Department shall determine the necessity for the additional control measures above on the basis of personal observation, results of ambient air quality monitoring, complaints, or any combination of the above (ARM 17.8.752).

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D.3. As required by the Department and Section III.A.1, Stillwater shall provide mitigation measures to control wind-blown emissions from the east-side waste rock disposal area. The Department shall determine the necessity for the additional control measures above on the basis of personal observation, results of ambient air quality monitoring, complaints, or any combination of the above (ARM 17.8.752).

# **Compliance Demonstration**

D.4. Once per calendar week during daylight hours, Stillwater shall visually survey the loading of Waste Rock onto Tailings Embankment/Storage for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on the loading of Waste Rock onto Tailings Embankment/Storage and for any other associated source of excessive fugitive emissions for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

D.5. Compliance monitoring for the mitigation measures described in Section III.D.2 and III.D.3 shall be evaluated by the Department on a case-by-case basis (ARM 17.8.1213).

# Recordkeeping

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- D.6. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.D.4. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).
- D.7. Stillwater shall maintain a log on site indicating any monitoring of compliance as required by the Department in accordance with Section III.D.5. The log shall include the date, time, action taken, and the initials of the documenting personnel (ARM 17.8.1212).

# Reporting

- D.8. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- D.9. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.10. The semiannual reporting shall (ARM 17.8.1212):
  - a. Summarize the results of any source testing conducted during the reporting period;
  - b. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.D.4;
  - c. Certify that a log of corrective actions was maintained as specified by Section III.D.6; and
  - d. Certify that a log was maintained for any compliance monitoring as specified in Section III.D.7

# E. EU007, EU008 – Disturbed Areas: Haul Roads

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
E.1, E.3, E.4,	Opacity	20%	Method 9	Semiannual	Semiannual
E.5, E.7, E.8, E.9			Visual Surveys	Weekly	
E.2, E.4, E.6, E.8, E.9	Airborne Particulate Matter	Reasonable Precautions	Water and/or Chemical Dust Suppressant	As Necessary	Semiannual

# **Conditions**

- E.1. Stillwater shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308(1)).
- E.2. Stillwater shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308(2)).

## **Compliance Demonstration**

E.3. Once per calendar week during daylight hours, Stillwater shall visually survey the Disturbed Areas and Haul Roads for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on Disturbed Areas and Haul Roads and for any other associated source of excessive fugitive emissions for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

E.4. Stillwater shall treat all unpaved portions of the access roads, parking lots, and general plant area with fresh water and/or chemical dust suppressant as necessary to monitor compliance with the reasonable precautions limitation in Section III.E.2 (ARM 17.8.749).

# Recordkeeping

- E.5. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.E.3. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).
- E.6. Stillwater shall maintain, on site, a log of the reasonable precautions taken as required by Section III.E.5. Each log entry shall include the date, time, summary of action taken, and the initials of the documenting personnel (ARM 17.8.1212).

# Reporting

- E.7. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- E.8. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.9. The semiannual reporting shall (ARM 17.8.1212):
  - a. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.E.3;
  - b. Certify that a log of corrective actions was maintained as specified by Section III.E.5; and
  - c. Certify that a log was maintained for reasonable precautions as specified in Section III.E.6.

# F. EU09, EU010, EU011 – Combustion of Diesel Fuel and Gasoline; Paste Plant Emergency Flush **Pump Emergency Diesel Generator**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting
			Method	Frequency	Requirements
F.1, F.3, F.5,	Opacity	20%	Method 9	Semiannual	Semiannual
F.7, F.8, F.9			Visual Survey	Weekly	
F.2, F.4, F.6,	Paste Plant Flush	500 Hours	Recordkeeping	Ongoing	Semiannual
F.8, F.9	Pump Emergency	Operation/12			
	Diesel Generator	Months			

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#### **Conditions**

- F.1. Stillwater shall not cause or authorize to be discharged into the atmosphere from any source, visible emissions that exhibit an opacity of 20% or greater, unless specified elsewhere in this permit (ARM 17.8.304 and ARM 17.8.752).
- F.2. The Paste Plant Emergency Flush Pump emergency diesel generator shall be used for emergency or back-up operations only and shall be limited to 500 hours of operation during any rolling 12-month time period (ARM 17.8.749).

# **Compliance Demonstration**

F.3. Once per calendar week during daylight hours, Stillwater shall visually survey the Combustion of Diesel Fuel and Gasoline for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on Combustion of Diesel Fuel and Gasoline and for any other associated source of excessive fugitive emissions for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

F.4. Compliance monitoring for the Paste Plant Emergency Flush Pump emergency diesel generator requirements contained in Section III.F.2 shall be accomplished through recordkeeping (ARM 17.8.1213).

# Recordkeeping

- F.5. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.F.3. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).
- F.6. Stillwater shall maintain, on site, a log of the total annual hours of operation for the Paste Plant Emergency Flush Pump emergency diesel generator as required by Section III.F.4. Each log entry shall include the date, time, reason for operation for each time the Paste Plant Emergency Flush Pump emergency diesel generator was operated, a rolling total of the hours of operation for the current month and the previous 11 months, and the initials of the documenting personnel (ARM 17.8.1212).

# Reporting

- F.7. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- F.8. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.9. The semiannual reporting shall (ARM 17.8.1212):
  - Summarize the results of any source testing conducted during the reporting period;
  - b. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.F.3;
  - c. Certify that a log of corrective actions was maintained as specified by Section III.F.5; and
  - d. Summarize the logged hours of operation for the Past Plant Emergency Flush Pump emergency diesel generator according to Section III.F.6.

# **G.** EU012 – Cement Batch Plant Operations

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance D Method	emonstration Frequency	Reporting Requirements
G.1, G.2, G.3, G.4, G.6, G.7,	Opacity	20%	Method 9	Semiannual	
G.4, G.6, G.7, G.9, G.10, G.11			Visual Survey	Weekly	
			Operation and Maintenance of the Baghouse	Whenever process equipment is	Semiannual
				operating	

# **Conditions**

G.1. Stillwater shall not cause or authorize to be discharged into the outdoor atmosphere, from any source associated with the cement batch plant operation, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

# **Compliance Demonstration**

- G.2. Water and/or chemical dust suppressant shall be available on site and used, as necessary, to maintain compliance with the opacity limitations for cement batch plant operations in Section III.G.1 (ARM 17.8.752).
- G.3. The cement silo associated with the cement batch plant operation shall be enclosed with fabric filtration controlling particulate emissions in the exhaust air. Stillwater shall inspect and maintain the fabric filtration to ensure proper operation of the fabric filtration (ARM 17.8.1213).
- G.4. Once per calendar week during daylight hours, Stillwater shall visually survey the cement batch plant operations for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of

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If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on cement batch plant operations and any other associated source of excessive fugitive emissions for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.106).

G.5. Compliance monitoring for water and/or chemical dust suppressant availability and use (III.G.2) and for the cement silo enclosure with fabric filtration controlling particulate emissions in the exhaust air (III.G.3) shall be accomplished through recordkeeping (ARM 17.8.1213).

# Recordkeeping

- G.6. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.G.4. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).
- G.7. Stillwater shall maintain a log indicating water and or chemical dust suppressant availability and use for monitoring compliance with opacity limitations (ARM 17.8.1212).
- G.8. Stillwater shall maintain a log monitoring compliance with the requirement for the cement silo enclosure with fabric filtration controlling particulate emissions in the exhaust air. The log shall include any maintenance activities associated with Section III.G.3 including the date, time, action taken, and the initials of the documenting personnel (ARM 17.8.1212).

# Reporting

- G.9. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.10. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- G.11. The semiannual reporting shall (ARM 17.8.1212):
  - a. Summarize the results of any source testing conducted during the reporting period;
  - b. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.G.4;

- c. Certify that a log of corrective actions was maintained as specified by Section III.G.6;
- d. Summarize the water and or chemical dust suppressant availability and use as described in G.7; and
- e. Certify compliance with the requirements of G.8.

# H. EU013, EU014 – Diesel Air Compressor #1, Diesel Air Compressor #2

Condition(s)	Pollutant/Parameter	Permit Limit	<b>Compliance Demonstration</b>		Reporting
			Method	Frequency	Requirements
H.1, H.2, H.3, H.4, H.5, H.6	Opacity	20%	Method 9	Semiannual	Semiannual
11.4, 11.5, 11.0			Visual Survey	Weekly	

# **Conditions**

H.1. Stillwater shall not cause or authorize to be discharged into the atmosphere from any source, visible emissions that exhibit an opacity of 20% or greater, unless specified elsewhere in this permit (ARM 17.8.304 and ARM 17.8.752).

# **Compliance Demonstration**

H.2. Once per calendar week during daylight hours, Stillwater shall visually survey the Diesel Air Compressor #1 and the Diesel Air Compressor #2 for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on the Diesel Air Compressor #1 and the Diesel Air Compressor #2 and for any other associated source of excessive fugitive emissions for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

# Recordkeeping

All compliance source test recordkeeping shall be performed in accordance with the test method H.3. used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.H.2. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).

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# Reporting

- H.4. All source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- H.5. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- H.6. The semiannual reporting shall (ARM 17.8.1212):
  - Summarize the results of any source testing conducted during the reporting period;
  - b. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.H.2; and
  - Certify that a log of corrective actions was maintained as specified by Section III.H.3.

## I. EU015 – Soda Ash Bin Vent

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting
			Method	Frequency	Requirements
I.1, I.3, I.4, I.6, I.7, I.8,	Particulate Matter	0.05 grams/dscm	Method 5	As Required by the	
I.9, I.10, I.11				Department	
				and Section	
				III.A.1	Semiannual
			Fabric Filter	Whenever	
			Baghouse	process	
				equipment is	
				operating	
I.1, I.4, I.5,	Opacity	7% (stack/point	Method 9	Semiannual	
I.6, I.7, I.8,		source)			
I.9, I.10, I.11			Visual Surveys	Weekly	Semiannual
			Operation and	Whenever	Semiannuai
			Maintenance	process	
			of the	equipment is	
			Baghouse	operating	
I.1, I.5, I.6,	Opacity	10% (fugitive	Method 9	Semiannual	
I.8, I.9, I.10,		source)	Visual Surveys	Weekly	Semiannual
I.11				·	
I.2, I.6, I.8,	NSPS Requirements	Applicable	Recordkeeping	Ongoing	Semiannual
I.10, I.11	40 CFR 60, Subpart LL	Requirements			.,,

# **Conditions**

- I.1. Stillwater shall comply with all applicable standards, limitations, and the reporting, record keeping, and notification requirements of 40 CFR 60, Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) which include, but are not limited to, the following (ARM 17.8.340, ARM 17.8.752, and 40 CFR Part 60, Subpart LL):
  - Stillwater shall not cause or authorize to be discharged into the outdoor atmosphere from the soda ash bin vent, particulate matter in excess of 0.05 gram per dry standard cubic meter;

- b. Stillwater shall not cause or authorize to be discharged into the outdoor atmosphere from any stack/point source that exhibits an opacity of 7% or greater averaged over 6 consecutive minutes; and
- c. Stillwater shall not cause or authorize to be discharged into the outdoor atmosphere from any fugitive source that exhibits an opacity of 10% or greater averaged over 6 consecutive minutes.
- I.2. Stillwater shall comply with all applicable standards and limitations, test methods and procedures, and the reporting, recordkeeping and notification requirements contained in 40 CFR Part 60, Subparts A and LL, as it applies to the soda ash bin vent (ARM 17.8.752, ARM 17.8.340, and 40 CFR Part 60, Subpart LL).

# **Compliance Demonstration**

- I.3. As required by the Department and Section III.A.1, Stillwater shall perform a Method 5 source test to monitor compliance with the emission limitations in Section III.I.1. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.749).
- I.4. The soda ash bin vent shall utilize a fabric filter baghouse to control particulate emissions. Stillwater shall inspect and maintain the fabric filter baghouse to ensure proper operation of the baghouse (ARM 17.8.1213).
- I.5. Once per calendar week during daylight hours, Stillwater shall visually survey the Soda Ash Bin Vent for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to by any visible emissions. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, Stillwater shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions, unless cold weather or other circumstances would make this activity result in hazardous conditions. If corrective actions are taken, then Stillwater shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Stillwater of a liability for a violation determined using Method 9 (ARM 17.8.1213).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Stillwater shall perform the Method 9 source tests on the Soda Ash Bin Vent for that semiannual reporting period. The Method 9 source tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period shall be a minimum of 6 minutes unless any one reading is 7% (stack/point source) or 10% (fugitive source) or greater, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

# Recordkeeping

All compliance source test recordkeeping shall be performed in accordance with the test method I.6. used and the Montana Source Test Protocol and Procedures Manual. If visual surveys are performed, Stillwater shall maintain a log to verify that the visual surveys were performed as specified in Section III.I.5. Each log entry shall include the date, time, results of survey, and observer's initials. Whether visual surveys or Method 9 source tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken shall be recorded in the log (ARM 17.8.106 and ARM 17.8.1212).

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- I.7. Stillwater shall maintain a log monitoring compliance with the requirement to operate a fabric filter baghouse to control emissions from the soda ash bin vent. The log shall include any maintenance activities associated with Section III.I.4 including the date, time, action taken, and the initials of the documenting personnel (ARM 17.8.1212).
- I.8. Stillwater shall maintain a log monitoring compliance with the requirements of 40 CFR Part 60, Subparts A and LL, as applicable (ARM 17.8.1212).

# Reporting

- I.9. All compliance source test reports shall be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- I.10. The annual compliance certification required by Section V.B shall contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- I.11. The semiannual reporting shall (ARM 17.8.1212):
  - Summarize the results of any source testing conducted during the reporting period;
  - b. Certify that the visual surveys or Method 9 source test results were performed and logged as specified by Section III.I.5;
  - c. Certify that a log of corrective actions was maintained as specified in Section III.I.7;
  - d. Certify that a log was maintained for operation of the baghouse as specified in Section III.I.8;
  - Certify compliance with the requirements of 40 CFR Part 60, Subparts A and LL, as applicable.

#### **SECTION IV.** NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

#### **Facility-Wide** A.

The following table contains non-applicable requirements that are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citation	Reason
ARM 17.8.320, ARM 17.8.321, ARM 17.8.323, ARM 17.8.326, ARM 17.8.330, ARM 17.8.331, ARM 17.8.332, ARM 17.8.333, ARM 17.8.334, ARM 17.8.610, ARM 17.8.613, ARM 17.8.614, 40 CFR Part 57	The facility does not have this emission unit.
ARM 17.8.809, ARM 17.8.818, ARM 17.8.819, ARM 17.8.820, ARM 17.8.821, ARM 17.8.822, ARM 17.8.823, ARM 17.8.824, ARM 17.8.827, ARM 17.8.1106, ARM 17.8.1107, ARM 17.8.1110, ARM 17.8.1111	This rule does not apply to the changes covered by Permits 2459, 2459A, 2459A-2, 2459-03, 2459-04, 2459-05, 2459-06, 2459-07, 2459-08, 2459-09, 2459-10, 2459-11, 2459-12, and 2459-13 because no changes have been made at the facility that would trigger these procedural requirements. All pollutants are below PSD thresholds. Stillwater has allowable NO <sub>X</sub> emissions greater than 250 tpy. However, because the facility is not a listed source, the fugitive NO <sub>x</sub> emissions are not counted toward a PSD determination.
40 CFR 60, Subparts C, Ca, Cb, Cc, Cd, D, Da, Db, Dc, E, Ea, Eb, G, H, I, J, K, Ka, Kb, L-X, Z, AA-EE, GG-HH, KK, MM, NN, PP-XX, AAA-BBB, DDD, FFF-LLL, NNN, PPP-QQQ, RRR-WWW	The facility is not in this source category.
40 CFR 61, Subparts B-F, H-L, N-R, T, V-W, Y, BB, FF	The facility is not in this source category.
40 CFR 63, Subparts F-I, L-O, Q-R, T, W-Y, CC-EE, GG, II-KK, OO-RR, VV	The facility is not in this source category.
40 CFR 68	The facility is not in this source category.
40 CFR 72	The facility is not in this source category.
40 CFR 73	The facility is not in this source category.
40 CFR 75	The facility is not in this source category.
40 CFR 77	The facility is not in this source category.
40 CFR 78	The facility is not in this source category.
40 CFR 82, Subparts A-E, G-H	The facility is not in this source category.

#### В. **Emission Units**

The permit application identified applicable requirements. Non-applicable requirements for individual or specific emission units were not listed. The Department has listed all non-applicable requirements in Section IV.A. These requirements relate to each specific unit, as well as facility wide.

#### GENERAL PERMIT CONDITIONS SECTION V.

# A. COMPLIANCE REQUIREMENTS

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

- The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
- The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
- The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
- Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
- For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

# **CERTIFICATION REQUIREMENTS**

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

- 1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).

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- Compliance certifications shall include the following: 3.
  - The identification of each term or condition of the permit that is the basis of the certification
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term or condition during the certification period, consistent with ARM 17.8.1212
  - The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent (based on the method or means designated in ARM 17.8.1213(7)(c)(ii), as described above)
  - Such other facts as the Department may require to determine the compliance status of the source
- All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

# C. PERMIT SHIELD

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

- The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
- The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board, until such time as the Board renders its final decision.
- Nothing in this permit alters or affects the following:
  - The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section
  - The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance
  - The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of c. the FCAA
  - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA
  - The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA
  - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA

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- The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
- Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
- The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
- The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

# MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS ARM 17.8, Subchapter 12, operating Permit Program §1212(2)&(3)

- Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring 1. records that include the following information:
  - The date, place as defined in the permit, and time of sampling or measurement a.
  - b. The date(s) analyses were performed
  - The company or entity that performed the analyses c.
  - d. The analytical techniques or methods used
  - e. The results of such analyses
  - f. The operating conditions at the time of sampling or measurement
- The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

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3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

## E. PROMPT DEVIATION REPORTING

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

# F. EMERGENCY PROVISIONS

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

- 1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency
  - b. The permitted facility was at the time being properly operated
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit
  - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

## G. INSPECTION AND ENTRY

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

- Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
  - Enter the premises where a source required to obtain a permit is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of the permit
  - Have access to and copy, at reasonable times, any records that must be kept under the h. conditions of the permit
  - Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit
  - As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements
- The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

## H. FEE PAYMENT

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

- The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
- Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
- If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

## MINOR PERMIT MODIFICATIONS

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.

OP2459-04 26 Date of Decision: 05/30/07 2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

# J. CHANGES NOT REQUIRING PERMIT REVISION

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

- 1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met.
  - a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter7
  - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10
  - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions
  - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit
  - e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes
- 2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
- 3. Pursuant to the conditions above, the permittee is authorized to make Sec. 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- 4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
  - a. Each proposed change does not weaken the enforceability of any existing permit conditions
  - b. The Department has not objected to such change
  - c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition
  - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change
- 5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

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#### K. SIGNIFICANT PERMIT MODIFICATIONS

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

- 1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
  - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment
  - b. Every significant change in existing permit monitoring terms or conditions
  - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule or
  - d. Any other change determined by the Department to be significant
- 2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
- 3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

## L. REOPENING FOR CAUSE

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances.

- 1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2).
- 2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit.
- The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
- 4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

# M. PERMIT EXPIRATION AND RENEWAL

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

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1. This permit is issued for a fixed term of 5 years.

- 2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
- 3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
- 4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

# N. SEVERABILITY CLAUSE

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(1)

- 1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
- 2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

## O. TRANSFER OR ASSIGNMENT OF OWNERSHIP

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

- 1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
- 2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

# P. EMISSIONS TRADING, MARKETABLE PERMITS, ECONOMIC INCENTIVES ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

## O. NO PROPERTY RIGHTS CONVEYED

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

# **R. TESTING REQUIREMENTS**

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

# SOURCE TESTING PROTOCOL

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

#### T. MALFUNCTIONS

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

# U. CIRCUMVENTION

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

#### V. MOTOR VEHICLES

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

## W. ANNUAL EMISSIONS INVENTORY

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

# X. OPEN BURNING

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

#### Y. PRECONSTRUCTION PERMITS

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §743 and 764 (ARM 17.8.745(1), and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

- 1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.745(1)(a)-(k).
- 2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.

- 3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant. except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
  - Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2)
  - Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8
  - Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804
  - Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting
  - Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable
- 4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1). (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

# Z. NATIONAL EMISSION STANDARD FOR ASBESTOS

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

#### AA. ASBESTOS

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ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, et seq., and ARM 17.74.401, et seq. (State only)

# BB. STRATOSPHERIC OZONE PROTECTION - SERVICING OF MOTOR VEHICLE AIR **CONDITIONERS**

40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

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# CC. STRATOSPHERIC OZONE PROTECTION – RECYCLING AND EMISSION REDUCTIONS

40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B.

- 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
- 2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
- 3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161.
- 4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166.
- 5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
- 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

## DD. EMERGENCY EPISODE PLAN

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

# EE. DEFINITIONS

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

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# **APPENDICES**

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#### **APPENDIX - A INSIGNIFICANT EMISSION UNITS**

The information in this appendix is not State or Federally enforceable, but is presented to **Disclaimer:** assist Stillwater, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emission unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Sec. 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

# **List of Insignificant Activities:**

The following table of insignificant sources and/or activities were provided by Stillwater. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emission Unit ID	Description
IEU01	SAG Mill (wet process)
IEU02	Ball Mills
IEU03	Cycloning
IEU04	Floatation Circuit
IEU05	Thickener
IEU06	Vacuum Filter
IEU07	Bedding Material Crusher
IEU09	Bedding Material Screening
IEU10	Topsoil Stockpiles
IEU11	Coarse Ore Stockpiles
IEU12	Paste Plant Operations
IEU13	Propane Combustion
IEU14	Shaft Generator
IEU15	Open Burning
IEU16	Fuel Storage Tanks

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#### APPENDIX - B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, et seq.

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) Corrects typographical errors
- (b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source
- (c) Requires more frequent monitoring or reporting by Stillwater
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225 or
- (f) Incorporates any other type of change, which the Department has determined to be similar to those revisions set forth in (a)-(e), above
- "Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):
  - (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA
  - (b) Any federally enforceable term, condition or other requirement of any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D
  - (c) Any standard or other requirement under Sec. 7411 of the FCAA, including Sec. 7411(d)
  - (d) Any standard or other requirement under Sec. 7412 of the FCAA, including any requirement concerning accident prevention under Sec. 7412(r)(7), but excluding the contents of any risk management plan required under Sec. 7412(r)
  - (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder
  - (f) Any requirements established pursuant to Sec. 7661c(b) or Sec. 7414(a)(3) of the FCAA
  - (g) Any standard or other requirement governing solid waste incineration, under Sec. 7429 of the FCAA

- (h) Any standard or other requirement for consumer and commercial products, under Sec. 7511b(e) of the FCAA
- (i) Any standard or other requirement for tank vessels, under Sec. 7511b(f) of the FCAA
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Sec. 7661c(e) of the FCAA or
- (1) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under subchapter 6
- "Department" means the Montana Department of Environmental Quality.
- "Emission unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.
- "Excess Emissions" means any visible emissions from a stack or source, viewed during the visual surveys, believed to exceed the visible emissions during normal operating conditions.
- "Excess Fugitive Emissions" means any visible emissions that leave the plant site boundaries.
- "FCAA" means the Federal Clean Air Act, as amended.
- "Federally enforceable" means all limitations and conditions that are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.
- "Fugitive emissions" means those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- "General air quality operating permit" or "general permit" means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.
- "Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Sec. 112(b) of the FCAA.
- "Non-federally enforceable requirement" means the following as they apply to emission units in a source requiring an air quality operating permit:
  - (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA

- (b) Any term, condition or other requirement contained in any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable
- (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

# "Regulated air pollutant" means the following:

- (a) Nitrogen oxides or any volatile organic compounds
- (b) Any pollutant for which a national ambient air quality standard has been promulgated
- (c) Any pollutant that is subject to any standard promulgated under Sec. 7411 of the FCAA
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA or
- (e) Any pollutant subject to a standard or other requirement established or promulgated under Sec. 7412 of the FCAA, including but not limited to the following:
  - (i) Any pollutant subject to requirements under Sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Sec. 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Sec. 7412(e) of the FCAA
  - (ii) Any pollutant for which the requirements of Sec. 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Sec. 7412(g)(2) requirement

# "Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars) or
  - (ii) The delegation of authority to such representative is approved in advance by the Department
- (b) For a partnership or sole proprietorship: a general partner or the proprietor; respectively

- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

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## **Abbreviations:**

**ARM** Administrative Rules of Montana American Society of Testing Materials **ASTM BACT** Best Available Control Technology

**BDT** bone dry tons

**British Thermal Unit BTU** 

**CFR** Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

dry standard cubic foot dscf

dry standard cubic foot per minute dscfm **EEAP** Emergency Episode Action Plan U.S. Environmental Protection Agency **EPA** 

EPA Method Test methods contained in 40 CFR 60, Appendix A

EU emission unit

**FCAA** Federal Clean Air Act

grains gr

**HAP** hazardous air pollutant **IEU** insignificant emission unit

thousand board feet Mbdft

40 CFR 60, Appendix A, Method 5 Method 5 Method 9 40 CFR 60, Appendix A, Method 9

million board feet MMbdft

**MMBTU** million British Thermal Units

oxides of nitrogen  $NO_x$ nitrogen dioxide  $NO_2$ 

oxygen  $O_2$ Pb lead

PM particulate matter

particulate matter less than 10 microns in size  $PM_{10}$ 

pounds per square inch psi scf standard cubic feet

Source Industrial Classification SIC

 $SO_2$ sulfur dioxide  $SO_x$ oxides of sulfur tons per year tpy U.S.C. United States Code VE visible emissions

VOC volatile organic compound

# APPENDIX - C NOTIFICATION ADDRESSES

# Compliance Notifications:

Montana Department of Environmental Quality Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901 Helena, MT 59620-0901

United States EPA Region VIII, Montana Office Air Program Manager Federal Office Building 10 West 15th Street, Suite 3200 Helena, MT 59626

# Permit Modifications:

Montana Department of Environmental Quality Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901 Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance Air and Radiation Program US EPA Region VIII 8P-AR 1595 Wynkoop Street Denver, CO 80202-1129

OP2459-04 C-1 Date of Decision: 05/30/07

#### **APPENDIX - D** AIR QUALITY INSPECTOR INFORMATION

**Disclaimer:** The information in this appendix is not State or Federally enforceable but is presented to assist Stillwater, permitting authority, inspectors, and the public.

1. **Direction to Plant:** The Stillwater Mine is located in Nye, Montana. Directions to the mine from Interstate 90 are as follows: From the Columbus, MT exit, go South on Highway 78 to its junction with Highway 420. Go West on Highway 420 to the town of Nye, MT.

# 2. Safety Equipment Required:

- Hard Hat
- **Hearing Protection**
- Steel Toed Footwear
- Safety Glasses
- 3. Facility Plot Plan: The facility plot plan was submitted as part of the permit application. A copy can be obtained from the Department upon request.

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